

Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

The Honorable James C. Greenwood (PA-08)

Testimony: Exploration of the Seas Act

October 27, 1999

Mr. Chairman, before I begin, I would like to express my appreciation to you for holding today's hearing on my Exploration of the Seas Act (H.R.2090), and thank you, Mr. Farr, Mr. Gilchrest and Mr. Romero-Barcelo, all members of this subcommittee, and Mr. Sensenbrenner, the Chairman of the Science Committee, for their cosponsorship of this bill. A visitor to our solar system asked to name the third planet from the sun would most certainly not name it Earth as early land-bound humans did, but rather Oceania for the dominating character of its seas. Seventy-five percent of our planet's surface and ninety-five percent of its biosphere is ocean.

Life began in the sea, which is now the home of somewhere between ten and one hundred million spectacularly diverse species. Ninety-seven percent of the planet's water is in its ocean. The oceans are the engines for our terrestrial weather patterns, the highway for international trade. Fifteen percent of the protein consumed by humans comes from the sea. Beneath the ocean floor lie unimaginable quantities of oil, gas, coal and minerals. Marine plants and animals possess inestimable biotechnological potential in the treatment of human illness. Coral reefs, sometimes described as the rain forests of the sea, contain uncommon chemicals that may be used to fight diseases for which scientists have not yet found a cure, such as cancer, AIDS, and diabetes. While the number of new chemical compounds that can be derived from land-based plants and microbial fermentation is limited, scientists have only just begun to explore the sea's vast molecular potential.

The oceans are our source, our sustenance, and the key to our future survival. But the capacity of the sea to absorb our waste and fulfill our desires is not without limit. Twenty percent of the world's coral reefs have been destroyed. Twenty percent and counting. Oceans are the dumping grounds for municipal trash, sewage and even nuclear waste. More than two thirds of the world's marine fish stocks have been fished beyond their level of maximum productivity.

If our children's children are to inherit the ocean's bounty, we must come to understand and manage it far better than we do today.

The Exploration of the Seas Act is the critical first step necessary to help mankind realize the untapped potential of the world's oceans and recognize that all life on our planet remains dependent on the vitality of the seas. This legislation accomplishes this goal by directing the Secretary of Commerce to contract with the National Academy of Sciences to establish the Coordinated Oceanographic Program Advisory Panel,

comprised of experts in ocean studies, including individuals with academic experience in oceanography, marine biology, marine geology, ichthyology, and ocean related economics, which will report to the Congress on the feasibility and social value of a coordinated oceanography program.

"If the sea is sick, we'll feel it. If it dies, we die. Our future and the state of the oceans are one." In these brief words of Dr. Sylvia Earle, from whom you will hear from shortly, in her book, Sea Change: A Message of the Oceans, she highlights how dependent our lives are on the ecological health and vitality of the seas. Many are concerned that our ocean resources continue to be vulnerable to a wide array of harms, including sewage, chemical and garbage disposal; runoff from agricultural and forested land, over-exploitation of fishery resources, environmental risks associated with the extraction of energy and mineral resources; coastal infrastructure development which could threaten habitats and species, and an explosion in the world's population.

Despite the seas' vast amount of potential and recognizing the potential for environmental threats that the oceans must battle, it is shocking to learn that the total ocean science research funding level in Fiscal Year 1997 for the nine primary agencies involved in support of ocean sciences research [National Science Foundation, NOAA (National Atmospheric and Oceanographic Organization), Office of Naval Research, NASA (National Aeronautics & Space Administration), USGS (United States Geological Survey), EPA (Environmental Protection Agency), Minerals Management Service, DOE (Department of Energy) and Defense Advanced Research Projects] was approximately \$600 million compared to the over \$8 billion spent by NASA on research and development.

It was after I compared the enormous value of the oceans with the amount of funding spent on ocean-related research that I became interested in pursuing an agenda which would place the United States in a position of significantly advancing ocean research. The National Academy of Sciences has the means by which to study and make determinations regarding the adoption and establishment of a coordinated oceanography program for the exploration of the seas, in which NOAA could participate in a role similar to that of NASA with regard to the International Space Station. Mr. Chairman, the Exploration of the Seas Act will assist in advancing a rigorous international ocean agenda.

Once again, Mr. Chairman, thank you for holding today's hearing. I look forward to working with the Committee to advance the Exploration of the Seas Act.

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